

**REMARKS:****In the Claims:**

The Examiner has objected the use of the term "sufficient" in claims 1, 9, 17 and 18. Accordingly, the Applicant has amended claims 1, 9, 17 and 18 to eliminate the use of the word "sufficient".

In addition the Examiner has objected to the numbering of claims 12-21, because there is no claim 11. Claim 11 was apparently, inadvertently left out of the application as filed. Accordingly, the Applicant has Canceled inadvertently omitted claim 11.

**35 USC Section 103:**

The Examiner has rejected claim 1 as being obvious in light of the Applicant's admitted prior art in view of Iijima et al. Claim 1 recites a method of forming a magnetic structure by depositing magnetic material into a photoresist trench. The magnetic structure is then sealed in a dielectric material and then opened up by a unique combination of chemical mechanical polishing and reactive ion milling. As taught in the specification, the ion milling used in combination with the chemical mechanical polishing allows the magnetic structure to be opened up without removing the magnetic material itself. This allows the magnetic material to be plated thinner than would be the case if chemical mechanical polishing alone were used.

Iijima et al. simply does not discuss such a process. Iijima, uses (for example in column 11, lines 40-43) a reactive ion etching process (RIE) to remove write gap material (eg. alumina) so that the lower magnetic pole can later be notched. The upper pole and a photoresist layer are used as masks to avoid removing write gap material or magnetic material of the first pole from the area within the track width. There is no teaching of a combination of chemical mechanical polishing (CMP) and reactive ion milling to open up the magnetic structure. Furthermore, one would not be lead by reading Iijima to consider using reactive ion milling in combination with chemical

mechanical polishing. This is because, not only does Iijima not mention reactive ion milling (it discusses reactive ion etching), but the structure disclosed is completely incompatible with the use of chemical mechanical polishing. A chemical mechanical polishing process performed before the reactive ion etch taught by Iijima, would completely remove the upper pole structure 54a, 55a, destroying the write head and removing the mask layer used for the notching process.

Therefore, Iijima does not teach the invention claimed in claim 1. Furthermore, there is no teaching in the Iijima or in the applicant's admitted prior art that would suggest combining these in a way that would result in the invention claimed in claim 1. Claim 1 is therefore, patentable over the prior art.

Claims 2-18 depend from claim 1 and add further limitation thereto. Therefore, claims 2-18 are necessarily also allowable over the prior art. In addition, with regard to claim 6, there is no teaching in any of the prior art for forming a photoresist structure with a trench that has a flared portion and for terminating plating of the magnetic material before reaching the flared portion. More specifically, neither Iijima nor Otsuka teach this process. For this reason, claim 6 is further patentable over the prior art.

A notice of allowance is, therefore, respectfully requested. For payment of any fees due in connection with the filing of this paper, the Commissioner is authorized to charge such fees to Deposit Account 50-1351 (Order no. HIT1P075).

Respectfully submitted,

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